

ALG.2 Ch. 6.2 p. 367 TOTAL - 20 POINTS

#16  $y(x) = 12(2.5)^x$   
(1p) multiplier  $2.5 > 1$  - EXPONENTIAL GROWTH

#18  $y(t) = 45\left(\frac{1}{4}\right)^t$   
(1p) multiplier  $\frac{1}{4} < 1$  - EXPONENTIAL DECAY

#20  $g(x) = 0.25(0.8)^x$   
(1p) multiplier  $0.8 < 1$  - EXPONENTIAL DECAY

#22  $m(x) = 222(0.9)^x$   
(1p) multiplier  $0.9 < 1$  - EXPONENTIAL DECAY

#24  $g(x) = 0.5(787)^{-x} = \frac{0.5}{787^x}$  EXPONENTIAL DECAY  
(1p) or  $g(x) = 0.5\left(\frac{1}{787}\right)^x$

#30  $P = 1000$   $r = 0.06$   $n = 2$   $t = 20$   
(5p)  $A(20) = 1000\left(1 + \frac{0.06}{2}\right)^{(2 \cdot 20)} \approx 3262.04$

#32  $P = 750$   $r = 0.05$   $n = 4$   $t = 10$   
(5p)  $A(10) = 750\left(1 + \frac{0.05}{4}\right)^{(4 \cdot 10)} \approx 1232.71$

#34  
(5p)  $P = 1800$   $r = 0.0565$   $n = 365$   $t = 6$   
 $A(6) = 1800\left(1 + \frac{0.0565}{365}\right)^{(365 \cdot 6)} \approx 2526.31$